CIMMS Research Scientist – Atmospheric Science Studies to Improve Short-Term Tornado Prediction

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at The University of Oklahoma (OU) working collaboratively with NOAA's National Severe Storms Laboratory (NSSL) is currently looking for a highly-qualified Research Scientist to contribute to research aimed at improving the understanding of potentially tornadic storms at 20 minute to 2 hour lead times. The incumbent will lead or co-lead studies focusing on the atmospheric processes of tornado producing storms using large observational data sets and numerical models (idealized and/or convection-allowing/resolving forecast models). The incumbent will work directly with research scientists at NSSL and CIMMS, and will be encouraged to collaborate actively with scientists from other institutions when appropriate. To meet needs related to severe storm process studies, the incumbent will participate in field observing campaigns and lead components of those campaigns. The incumbent will mentor students, including serving on graduate committees when appropriate. The position will be based at NSSL in Norman, OK within the National Weather Center (NWC), a highly collaborative forecasting, research, and academic environment containing a number of NOAA and OU organizations.

The principal duties of this position are:

1. Seek improved signals of tornado potential by examining WSR-88D and MRMS data, as well as other routine observational data sets as appropriate.
2. Perform idealized modeling (e.g. with CM1) to refine understanding of the processes of tornado formation, and the role of antecedent storm evolution and environmental inhomogeneity on those processes.
3. Explore processes related to tornado potential identified in forecasts produced by the NSSL Warn-on-Forecast System (WoFS).
4. Participate in the planning and execution of field programs to improve understanding of severe storm processes.
5. Contribute to scientific publications and present scientific results at professional off-site conferences, workshops, and symposia.
6. When appropriate, mentor students and other researchers and participate in graduate student committees.

The minimum qualifications for the position are:

1. A Ph.D. in meteorology or atmospheric science.
2. Expertise in use of CM1 or similar idealized modeling to understand supercell processes and the relationship between storms and their environments.

Preferred qualifications for the position are one or more of the following:

1. Experience using convection-allowing ensembles of forecast models (e.g. WoFS) to explore severe storm processes.
2. Expertise in single-radar analysis and use of MRMS analyses
3. Expertise in analysis of observational data from field experiments.
4. Experience with Unix, programming (e.g., Fortran, C, C++), and scripting (e.g. Python, NCL).

Normal working hours will be observed except for irregular hours during field data collection and/or conferences/workshops conducted at remote sites. The incumbent will work under general supervision in

order to satisfy the objectives of various research grants and programs, and is expected to contribute to field efforts as needed.

The beginning salary for this position will be based on qualifications and experience and will include University benefits. Information on benefits may be found at: http://hr.ou.edu/. The expected start date for the position is no later than September 2021.

Appointment to this position is contingent on passing a Department of Commerce/NOAA background check.

To apply, please forward your CV, cover letter and list of three references to:

CIMMS Careers
University of Oklahoma CIMMS
120 David L. Boren Blvd., Suite 2100
Norman, OK 73072-7304
CIMMS-Careers@ou.edu
ATTN: Tornado Prediction